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Socio-Cultural Norms and Perceptions of Menstruation: An Intergenerational Analysis of Rural Jamkhed, Maharashtra

Addison Scales
SIT Study Abroad

SOCIO-CULTURAL NORMS AND PERCEPTIONS OF MENSTRUATION: AN INTERGENERATIONAL ANALYSIS OF RURAL JAMKHED, MAHARASHTRA

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ABSTRACT

This study analyzes the socio-cultural norms and perceptions of menstruation between two generations of women in rural Jamkhed, Maharashtra. Interview questions were prepared for women between the ages of 18-26 and 35 or older to determine the level of dilution of the menstrual taboo and stigmas between age groups. All women resided in two villages in the rural area surrounding Jamkhed, Maharashtra. A variety of socio-cultural perceptions and practices were explored to determine their correlation with external influences on the shifting menstruation narrative. The socio-cultural factors of focus are family structure, media exposure, choice of material use, disposal and sustainability, segregation practices, and normalcy of discussion. The impact of CRHP as a source of information for community women is explored as well. The reappearing stigma that the woman is impure and polluted during menstruation is observed indirectly through interview questions regarding segregation practices. The overall significance of this study is to assist in developing an understanding of how the menstruation narrative is evolving between generations by building context of the socio-cultural practices and their influences.

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GLOSSARY

Abbreviations:

ASHA	Accredited Social Health Activist
ANM	Auxiliary Nurse Midwife
MHM	Menstrual Hygiene Management
NHM	National Health Mission
MHS	Menstrual Hygiene Scheme
CRHP	Comprehensive Rural Health Project
MHT	Mobile Health Team
VHW	Village Health Worker
WSHG	Women's Self-Help Group

INTRODUCTION

Menstruation in India

Background

An estimated half of all women globally are of menstruating age, 26% of the total population (Lysaght, 2016). India's population is expected to reach 1.4 billion by 2021, signifying approximately 370.5 million women of menstruating age in India alone (Central Bureau of Health Intelligence, 2019). Menstruation affects women of more vulnerable populations, such as urban slums and rural villages, most significantly. With 68.86% of India's population residing in rural regions, this magnitude and its implications for the female experience of menstruation cannot be disregarded (Central Bureau of Health Intelligence, 2019). Many women's menstrual experience is defined by a lack of resources and knowledge for proper menstrual hygiene management. Taboos and stigmas of menstruation materialize as social and cultural restrictions imposed onto women. These socio-cultural restrictions consequently prevent women from achieving effective menstrual hygiene management, access to private facilities, and solutions for suitable disposal.

Menstruation has gained urgency as a public health issue in India as a result of women's stories regarding health consequences and daily obstacles during menses. Meenakshi Gupta, co-founder of the NGO Goonj, reflects on two stories that helped to inspire the NGO's menstruation initiative: one woman died from tetanus after using an old blouse with metal hooks to control menstrual flow and another woman died after a centipede entered her body from the unclean cloth used during menstruation (personal communication, October 30, 2019). Dr. Shobha Arole, co-director of the Comprehensive Rural Health Project, linked poor menstrual hygiene to infections, cervical cancer, and pelvic inflammatory disease (personal communication, October

23, 2019). In rural areas that lack awareness of healthy menstrual hygiene management women have been reported to use tree bark, ash, dirty cloth, used clothes, or any other accessible item to control menstrual flow (Yagnik, 2013). These practices increase women's risk for infection and disease. Due to the woman's gendered role in households, she may experience barriers to seeking health care when needed. This indicates that menstrual related health issues may not receive proper treatment, perpetuating overall health inequality between genders in India. The lack of awareness of menstrual hygiene can be attributed to the culture of secrecy and silence that surrounds menstruation. When women lack space to speak openly about concerns related to menstruation and endure social and behavioral restrictions enforced by their families, women's menstrual health becomes increasingly devalued.

One study conducted a comprehensive review of literature on experiences of menstruation and determined common themes to be menstrual practices, perceptions of practices and environments, confidence, shame and distress, and containment of bleeding and odor. The study created an integrated model of menstrual experience which presented menstrual stigmas and gender norms as categories of the socio-cultural context while social support, behavioral expectations, and knowledge were further subcategories. Experiences observed within these subcategories were shame and distress, confidence, and perceptions of menstrual practices and the environment. The combination of these experiences was determined to impact the woman's social participation, education and employment, psychological health, and physical health. The integrated model displayed the interconnectedness of the socio-cultural context with resource limitations of both the physical and economic environment (Hennegan 2019). The model this study created demonstrates the centrality of socio-cultural context and the subcategories within it

to the experience of menstruation, as well as showing that the public health indicators occur as a consequence of this built context.

Menstruation in India continues to present itself first and foremost as a social and cultural issue rather than a health issue. Poor menstrual hygiene can result in severe health consequences and vastly unequal health outcomes for women compared to men. The lack of awareness of effective menstrual hygiene management is a consequence of the built socio-cultural context which demands silence and secrecy about menstruation. If the menstruation stigma and taboo persist, so will gender inequality both socially and in health outcomes. Taboos serve the purpose of maintaining hierarchy within a society, although they are originally created from fear of an unknown process. Socialization is the process through which cultures are maintained and transmitted across generations. As taboos are heavily based in generational culture and tradition, understanding how socialization in India impacts the evolving narrative of menstruation is essential to address its harsh taboo and could allow for long-term improvements in the health and social equality of women.

Government Initiative

In 2011, the Indian government created a Menstrual Hygiene Scheme (MHS) under the Adolescent Family Health Services branch for girls aged 10-19 in rural communities. Each state designates what percentage of rural adolescent girls will be covered by the scheme based on the budget proposal in their State Program Implementation Plan. Under this scheme, the ASHAs are responsible for distributing commercially produced sanitary pads at 6 rupees per pack to adolescent girls their communities. The ASHA is also expected to hold monthly meetings at the Aanganwadi center to discuss menstruation and other reproductive and sexual health issues with adolescent girls. The ASHA is supported with audio, video, and reading material to supplement

the lessons for adolescent girls. The three objectives of the government scheme include to raise awareness among adolescent girls, increase access to and use of sanitary pads, and ensure safe disposal of pads. One criticism of this approach argues that it focuses solely on practical and physical aspects of menstruation management while excluding psychosocial conditions that create the stigmatized environment of menstruation (Sinha & Paul, 2018). Additionally, ASHAs are paid incentives rather than salary and thus performance can vary significantly between individuals. Due to this variation in performance, adolescent girls may benefit from this scheme on erratic levels depending on the activism of their community ASHA.

In contrast to policy and program-based attempts to positively address MHM, the Indian government still taxes sanitary pads as a luxury item. This tax contradicts the first goal of Menstrual Hygiene Scheme: improving access to sanitary pads. Categorizing pads as a luxury item suggests that the products are unnecessary for women or that women experiencing menstruation is optional. The message of the MHS, in comparison, is to increase accessibility to pads, recognizing them as essential material for improving health outcomes for women. With women of lowest economic status requiring the greatest need for pads but the least access to them, taxing the menstrual products exacerbates the financial barrier to accessing pads and widens the health gap between those of high and low socioeconomic status (Sinha & Paul, 2018).

CRHP Approach

Located in Jamkhed, Maharashtra, The Comprehensive Rural Health Project has been an active public health NGO since 1970. CRHP's overall mission is to eliminate injustices that prevent communities from accessing health as a fundamental right. The Jamkhed Model was created as a comprehensive approach for community-based health and development. Within this model, CRHP utilizes a three-tier system to address public health issues which includes village

health workers, the mobile health team, and the secondary care hospital on CRHP's campus (Comprehensive Rural Health Project, 2014).

Village Health Workers are married women selected by their communities and trained by CRHP. The VHW is considered the fundamental agent of change for CRHP's comprehensive approach to improving village health. VHWs typically belong to low caste status and build skills to develop into confident community leaders throughout their training with CRHP. With skills to promote general health, preventative health, obstructed births, pneumonia, and mental health, most health issues in villages can be treated by VHWs. They mobilize their communities to take ownership over improving sanitation, hygiene, family planning, and maternal and infant health. VHWs also facilitate the Women's Groups and Adolescent Girls Program for their community. They receive training to educate adolescent girls on menstrual hygiene and are the primary source of menstruation knowledge for their community. After their initial training, the VHWs continue to meet consistently for CRHP-based training (Annual Report, 2017-2018).

The Mobile Health Team connects communities to the CRHP campus medical and developmental staff and facilities. The MHT members include a driver, social workers, paramedic, and a physician as needed. Despite job titles, all members of the team are considered equals as they each receive maximum training in all tasks and address patients' clinical and social questions. The MHT trains VHWs and works with them to provide health services to project villages as well as leading and supporting the Adolescent Boys and Girls Programs, Women's Self-Help Groups, and Farmer's Clubs. The MHT provides guidance for development projects in communities and connects villagers with medical staff at CRHP's Julia Hospital (Annual Report, 2017-2018).

CRHP initiated Women's Groups, community-based groups of women focused on increasing knowledge of health, social justice, and the environment. The Women's Groups often develop into Women's Self-Help Groups who prioritize economic stability. In the WSHGs, each member pays a small monthly fee which are collectively deposited into a bank account. Members of the group can then receive a low interest loan as needed to pay for school or starting a new business (Annual Report, 2017- 2018).

CRHP offers an Adolescent Girls Program as a six-month program for girls ages 12-18 facilitated by VHWs. The goal of this program is to educate the girls on mental and physical health, gender equality, social issues, and the environment. Included within their sexual health lessons, physiological and psychological changes in the body at the time of menstruation are discussed. Girls that cannot finish their schooling can also learn income generating skills through the Helping Hands program (Annual Report, 2018-2018).

Narrative of the Sanitary Pad

Media Influence

The discourse of global development often involves the dichotomy of western development compared to eastern traditionalism. This association of development with 'western' ideals translates into the association of western lifestyles with higher status. This status association is evident in the framing of menstruation through sanitary pad advertisements in the media. Commercially produced sanitary pads are presented to young target audiences as the western, more developed method of addressing menstrual flow.

In the U.S., a gradual shift from religion and culture dictating shame of menstruating women to capitalism defining public perception of menstruation occurred. As western consumerism continues to grow as a global trend, this shift to capitalistic control over

menstruation could likely expand to India as well, beginning in urban areas. With rapid globalization and modernization, rural communities previously untouched by technological influences will continue to see an increase in media presence. The narrative of the media thus cannot be ignored when viewing menstruation in the rural context.

As mobile devices and television technologies increase, the exposure to advertisements and targeted marketing techniques from the media simultaneously increases and capitalism continues to develop jurisdiction over the menstruation narrative. The accessibility of information and advertisements regarding commercially produced sanitary pads in rural areas of India will continue to heavily impact public perspective of menstruation. Advertisements define what is appropriate for open discussion within the menstruation narrative and project rules for what type and brand of menstrual product are appropriate onto their audience.

One study observed the transformation in media portrayal of homosexuality and HIV/AIDS from "estranged taboos into embraced social issues" to apply the trends to the portrayal of menstruation in India (pp 617, Yagnik, 2013). The study views trends in the media through framing theory, the idea that the intentional framing of an issue determines people's reactions. This framing can subsequently define which stigmas and taboos become either normalized or demonized by controlling the emotions and perceptions the population associates with the topic.

The framing of menstruation in Indian media began with conservative marketing focused on the hygienic qualities and other properties of sanitary pads, much like initial coverage in the west. While straightforward terms such as 'period' or 'menstruation' are rarely used, negative connotations of shame and pain have clear associations with menstruation in advertisements. Yagnik states, "the advertisements portray menstruation as a villain and the female hygiene

products as the hero that relieves the woman of the pain" (pp 627, Yagnik, 2013). By reinforcing the idea that menstruation is dirty and undesired, sanitary pad advertisements have the capability to perpetuate the negative menstruation stigma and taboo. Print mediums as a form of media originally framed most coverage of menstruation neutrally with the purpose of general education. The coverage did not address menstruation as either a health or social issue and, consequently, had little impact on the status of the stigmatization of menstruation (Yagnik, 2013).

In comparison to earlier approaches, the current framing of menstruation in Indian media is based more in "celebrating womanhood" and is in touch with the reality of menstruation as a health, gender, and social issue (pp 628, Yagnik, 2013). The same pattern observed in the framing of HIV/AIDS and homosexuality also occurred for menstruation portrayal through shifts from no framing, to negative framing, and lastly to positive framing. Yagnik argues that a fourth stage is normalized framing, which can be predicted based on other metamorphoses of social taboo framings (Yagnik, 2013). While menstruation in India has yet to achieve normalcy, the various media mediums have significant influence on public perception and will continue to have a growing audience with the expansion of technology and media scope.

Sustainability and Waste

Menstrual hygiene products fall into two categories: single use disposable products and reusable products. Generally, sanitary pads and tampons are disposable while cloth pads, menstrual cups, or menstrual underwear are reusable. Some single use disposable products can be compostable, such as pads made from natural fibers. Despite these options, in India, menstrual hygiene options outside of pad use are infrequently discussed. In regard to tampons and menstrual cups, these options remain unlikely to be utilized in rural areas of India due to the importance of an intact hymen for proving a girl's virginity. Inserting any item into the vagina

which could puncture the hymen is taboo and stigmatized because of cultural expectations for girls which demand virginity in relation to their personal value (personal communication, November 29, 2019).

According to WaterAid India, the menstrual hygiene product use distribution in India is 45% commercial pads and 50% cloth pads. The same report recorded that users were often unaware of menstrual hygiene products final destination after disposal. Common disposal practices include using dustbins, throwing into open spaces such as rivers, drains, wells, and lakes, burning products, burying products, or flushing in latrines (WaterAid India, 2019). With an estimated 121 million girls and women in India using an average of eight disposable sanitary pads each month, total waste accumulation is estimated to be 1.021 billion pads a month (Sing & Paul, 2018). This magnitude of waste demands attention as a byproduct of the increasing use of sanitary pads.

One objective of the previously referenced government Menstrual Hygiene Scheme is safe disposal of pads. The reality of safe disposal may vary depending on environmental conditions and regional waste disposal infrastructure. An article on MHM published in 2018 stated, “it is not yet decided whether soiled absorbents will be classified as hazardous solid waste (due to the presence of plastic in disposable napkins) or as biomedical waste, as it is contaminated with blood and body fluid” (pp 72, Sing & Paul, 2018). This waste classification is essential for mitigating environmental harm, but implementation could prove to be an additional barrier in both rural and urban regions.

Many sanitary pads contain products such as cellulose, super absorbent polymers, plastic covering, and adhesives. These components do not easily decompose and consequently contribute to pollution of the environment (WaterAid India, 2019). When burned, the plastic in

pads emits the toxic, carcinogenic fumes of furans and dioxins (Sing & Paul, 2018; WaterAid India, 2019). Environmentally harmful disposal methods perpetuate a cycle of inequality. Women access sanitary pads, increasing initial health outcomes regarding MHM. However, the presence of partially decomposed sanitary pads in the environment will then gradually damage natural resources, affecting the same community's access to their land's resources over time. Additionally, the frequent release of carcinogenic compounds into the air could detrimentally impact the overall health of communities while also contributing to air pollution on the national and global scale.

With the current status and impact of waste production on the globe, the significance of synthetic and plastic sanitary pad waste on the environment cannot be understated. In terms of long-term sustainability of community development, widespread use of sanitary pads among in communities without proper disposal infrastructure could exacerbate environmental and water pollution.

The addition of synthetic pads with plastic wraps to trash surpluses as well as the lack of proper places for females to dispose of the items contributes to a lack of feasibility for some rural communities to utilize commercially produced sanitary pads if additional measures for safe disposal are not adopted. As the narrative of menstruation continues to focus more centrally on sanitary pad use, the direct impact on the environment and quality of life for communities cannot be ignored. Degrading the environment and its natural resources is counterproductive to community development and therefor unsustainable long term. To maintain long-term health benefits of pad use, methods for waste disposal must also be adjusted and adapted.

Socio-Cultural Context

Perceptions of Impurity and Pollution

The perception of pollution remains central to the continuation of the menstruation taboo. One study associated pollution with the ability to "break up a state of balance, destroy desirable boundaries or give rise to unwanted conditions" (pp 30, Das, 2008). Indian culture has maintained notions of pollution with menstruation, creating a highly gendered narrative in which women remain subordinated. This involuntary pollution impressed onto women often results in their temporary separation from society. With the word taboo suggesting something as forbidden, practices physically and socially restricting women during menstruation are physical manifestations of the cultural taboo (Das, 2008).

Concepts of pollution and impurity are central to many traditional and religious values in India. Regarding menstruation, these concepts have dictated the female's monthly menses experience and restricted her liberty during menses for generations. These perceptions of impurity can be divided into physical body, social, and religious categories.

Physical stigmas of impurity materialize through the perception of a woman's menstruating body as dirty. Women have reported being unable to physically touch anyone else in their household as well as having to take purifying baths using cow urine to purify their bodies. Another reported belief is that menstrual blood is dirty, and the body must cleanse itself by releasing the blood. Women have reported abstaining from sex during menstruation to prevent imposing the harmful effects of menstruation on their own or the man's body. Some explanations for this practice included that menstruation releases heat which can cause irritation if one has intercourse and that intercourse prevents the release of the blood which causes the woman to contract diseases (Garg, Sharma, Sahay 2001).

A study conducted in the south Indian state of Tamil Nadu screened 1200 women and found that only 18.8% of these women were not segregated from their house during

menstruation. The most common explanation for this lack of separation was economic necessity. Many women completed their cleansing ritual bath before returning to work in the house because of their inability to remain idle as the only female. This displays that a concern for purity remained present in many households despite the lack of female separation (Ferro-Luzzi, 1974). A lack of segregation cannot therefore be interpreted directly as a lack of menstrual stigma and association of pollution, rather, the explanation for the behavior is necessary to understand the family's perceptions and beliefs.

The same Tamil Nadu study determined that only 21.3% of the 1200 women screened cook during menstruation. Of that 21.3%, only 48 women had no belief in menstrual pollution, some were required to cook based on necessity but would take a purifying bath first, and others believed in pollution but were still able to cook. Regarding food in India, it is commonly believed that "the cooking process can make food susceptible to defilement" (Ferro-Luzzi, 1974). Pollution is intertwined in the narrative of food in India and consequently those considered impure are considered unfit to cook for those considered pure. This materializes in the prevention of 'polluted' menstruating women from working in the kitchen, as well as the avoidance of low caste cooks. The creation of barriers determining who is deemed pure enough to cook food for those eating perpetuates a harsh hierarchy. When menstruating, women are deemed less pure than men and thus unfit to cook for them. This practice places women in a position of inferiority, restricted by the discretion of others who measure her level of purity. In terms of the female's dignity and self-image, this monthly suppression serves as a constant reinforcement of patriarchal societal structure, consequently limiting the level of dignity and positive self-image achievable for women.

Social perceptions include the treatment of women in their own homes and communities. Some women are prevented from entering their house or kitchen to cook while menstruating (Das, 2008). In Satoli, Uttarkhand, one village woman slept in a side room detached from the main house and was only able to cook for herself using separate kitchen utensils. The utensils and belongings in the side room had to remain isolated to avoid polluting the main house. Women in a village near Jamkhed, Maharashtra were said to have been isolated from the kitchen and given only bread to eat by family members in the past (personal communication, October 24, 2019).

Religious perceptions of impurity include women being told if they enter holy grounds or go near images of God, they will pollute those spaces. Some also believe that polluting an image of god will invoke the god's anger upon them (personal communication, October 24, 2019). Stemming from this belief, women are sometimes prevented from entering temples and prayer rooms during menstruation (Das, 2008). Prohibition from temple entry while menstruating was the most universally observed practice in the Tamil Nadu based study with only 4.2% of the total 1200 participants reporting no observation of pollution in regard to divine spaces (Ferro-Luzzi, 1974). This prevention of women from entering temples is indicative that discriminatory socio-cultural perceptions persist in the community despite significantly improved physical indicators of menstrual hygiene management.

Religions and Menstruation

Throughout messages from major religions, diction noting the 'impurity' of menstruating women consistently appears. Hinduism emphasizes the power of pollution a woman possesses during menstruation. This pollution often translates into danger as beliefs include that menstruating women can endanger the total catch for a fishing village or incur curses of the Gods

(Bulbeck, 1998). The contradiction of views of both power and pollution projected onto Hindu women "led to the loss of autonomy, male control and management of her sexuality" (Chanana, 2001). Hindu mythology offers explanations for the woman's position of impurity, and consequently, inferiority to men. One explanation offered from a Vedic text is that Indra's stain of murdering a Brahmin was transferred to women and consequently women bear Indra's curse of impurity and danger (Das, 2008).

For Muslim women, one study reported restrictions from touching the Quran, entering mosques, offering ritual prayer, and having sex with one's husband while menstruating. This same study determined that the Quran warns men to abstain from sexual activity with a menstruating woman because menstruation itself "is an impurity" (Bhartiya, 2013, p 524).

In some early European churches, "intercourse with a menstruating woman was defined as a mortal sin; it was still considered a venial sin at the beginning of the twentieth century" and some opposed menstruating women taking communion (Bulbeck, 1998, p 136). In the Eastern Orthodox Christian Church, menstruating women were unable to touch the bible or religious icons as they were perceived as impure. Western Christianity generally does not enforce a strong taboo as opposed to early Christianity.

Perpetuation of Gender Inequality

Despite improvements in overall development of India, the status of women remains remarkably low, particularly in rural communities. In relation to development, women often remain perceived only as passive recipients of policy and social improvements rather than active participants. They become contextualized as wives and mothers and are denied recognition as producers of valuable work (Dhruvarajan, 1996). The dowry system can disvalue females compared to the understanding that "she gives her body, her work, her children in conjunction

with the dowry gifts of her family" (Bulbeck, 2019, p 121). Caste hierarchy and gender inequality are also closely interconnected as women of low caste are impressed into the lowest achievable position of the social hierarchy.

As a young girl attains menarche, she is suddenly subject to complete control over her sexuality by those around her. Many rituals for the onset of menarche convey the clear message that the girl has become a sexual being and consequently negotiations for her marriage can begin (Das, 2008). Because of the significance of virginity in determining a girl's value and the harsh stigma against the girl becoming pregnant before marriage, families often rush to marry girls soon after she begins menstruating (personal communication, November 29, 2019). For many females, the start of menstruation signifies the beginning of subjection to male and elder familial control of their body.

The strong protection of the female's sexuality in accordance with notions of feminine impurity and purity tied to virginity generally lower marriage age. Because interaction with males in public, educational spaces is viewed as a threat the girl's purity and thus to the goal of wifehood and motherhood, girls are sometimes restricted from higher education or married younger before continuing their education. The need for control and protection of female sexuality consequently constrains girls' educational opportunities while lowering marriage ages (Chanana, 2001).

As a patrilocal society, women arrive as strangers in the home of the family they marry into. The mother-in-law typically maintains a position of power over the women, and if multiple daughters-in-law are present, they must compete for needed resources. This perpetuates the traditional expectation that women should remain obedient to the men and elders of the household, giving her little personal autonomy (Bulbeck, 1998). The intense control of the

woman's body in relation to puberty, sexuality, and menstruation to preserve purity perpetuates a lack of control for the woman herself as she remains subject to restrictions imposed by males and older generations in the family. This control enforces male superiority and female subordination in the patriarchal society.

Women bear the burden of maintaining familial pride. With menstruation, this pride demands secrecy and the perpetuation of taboos which help to sustain 'purity' of the household and religious spaces. To uphold this pride, women have to bear the shame and secrecy which often results in the use of unhygienic menstrual management. With the ability to 'pollute' sacred religious or household spaces, women's misunderstood menstruation becomes perceived as a danger to others. Over years of continuous suppression and restrictions, these practices are certain to induce shame and a lack of dignity within women.

OBJECTIVE

The central purpose of this study is to analyze how the narrative of socio-cultural norms and perceptions of menstruation have shifted between two generations in rural Jamkhed, Maharashtra. The study is based on the understanding that the socio-cultural conditions under which a woman experiences menstruation have various external influences. This combination collectively perpetuates gender inequality and poor health outcomes for women. The study aims to observe the level at which the menstruation taboo and stigma has been diluted between generations through questions regarding the woman's experience of social segregation, familial communication, primary sources information, and decision process for material used to control menstrual flow.

The research will analyze why changes in perception have occurred and trace contributing factors that have influenced the shift in norms. Sub-topics include the role of the

media and TV advertisements, sustainability and waste, dignity and self-image, impurity, and shame. An analysis of the discourse of these topics from the perspective of village women and village health workers will create a lens to determine how the stigma and taboo of menstruation has shifted in the past generation. The research will assess the role of CRHP in formulating the socio-cultural conditions for the women and how CRHP fits into the discourse of perceptions in terms of information pathways and transmittal.

METHODOLOGY

The interview question topics included various practices and perceptions regarding menstruation to evaluate the shift in women's experiences in the last generation. One topic was women's choice of menstrual hygiene product and the motive behind this choice. This question was included to analyze whether women's preference for different materials has shifted and what outside influences affect menstrual product preference. Disposal methods of the menstrual hygiene products were also discussed to address the sustainability of practices relative to the capacity of the environment to support menstrual waste. The choice of disposal methods also demonstrates women's knowledge and indicates where their information disseminated from. Lastly, the practice of segregating and limiting women during menstruation was explored to observe the level of dilution of stigmas and taboo between generations. The women were asked whether they are able to enter their kitchen and cook, participate in auspicious ceremonies and puja, enter prayer rooms, and whether they interact with and touch their husbands during menstruation.

The study was conducted in the rural region surrounding Jamkhed, Maharashtra through the Comprehensive Rural Health Project. According to the Maharashtra State Public Health Department report of 2018, Maharashtra has the second largest population of the Indian states,

totaling 112.3 million inhabitants. 54.77% of the population resides in rural regions and 42.22% in urban with an overall sex ratio of 929 females to 1000 males (Directorate of Health Services, 2018). In the Jamkhed region specifically, CRHP provides services that impact 500,000 people. This location and NGO partnership was selected based on CRHP's extensive work to improve menstrual practices and perceptions. CRHP's presence in the Jamkhed community for almost 50 years has allowed them to build extensive trust and partnerships with nearby villages, providing accessibility of women and health workers to interview.

Twenty-four interviews with community women were conducted in two CRHP project villages. Two age groups of community women were selected to create a generational gap for result comparison. Twelve women were in the age group of 18-26 years old and twelve women were 35 or older. The twenty-four women were selected collectively from the two villages based on accessibility and relevance to the age group restrictions. Sixteen participants resided in Village 1 with eight belonging to each age group. Eight total participants resided in Village 2 with four belonging to each age group. Consequently, the composition of each of the two age groups was eight women from Village 1 and four women from Village 2.

Two VHWs were interviewed, one from each village utilized for community women interviews. The VHWs were interviewed to determine their role in their respective community's women's perceptions and practices regarding menstruation.

One uniform interview template was utilized for all community women interviews. A separate template was created for the village health worker interviews (See Appendix 1). Each questionnaire was translated into Marathi prior to the start of the interviews. The Marathi transcription of the questionnaire was then read by members of the Mobile Health Team to allow the interviews to flow without pauses for translation between English and Marathi. One MHT

member read the questionnaire to the interviewees while another MHT member recorded their answers on paper.

RESULTS & DISCUSSION

Community Women

For multiple interviews, more than one respondent resided in the same household. All participants were married, although this was not a requirement for the study. Three participants were Muslim while the remaining twenty-one women were Hindu. The women represented a variety of educational backgrounds ranging from uneducated to Bachelor of Arts and Diploma of Education (See Table 1 and 2, Appendix 2). The 18-26 age group and the 35+ age group will be referred to as Age Group 1 and Age Group 2, respectively.

Menstruation Awareness

The women were first asked why they believe menstruation occurs. The responses of the twelve women in Age Group 1 included that they do not know (4), it is natural (5), it is a compulsory thing that all women must get to become mothers (1), all women experience it (1), and it gets rid of infected blood in the body (1). In Age Group 2, eleven of the twelve women responded to this question. Responses included that they do not know (6), it is natural (3), and they only know there are pains (2). Of the twenty-three total responses between both age groups, only one woman referenced menstruation's importance for motherhood. No woman discussed any knowledge of the physiological process of menstruation. The response that menstruation is natural signifies a basic understanding that the physical process is normal for females to experience. Nonetheless, it cannot be deducted that this understanding of the normalcy of menstruation for women correlates to a rejection of socio-cultural stigmatization that mystifies the bodily process.

The women were next asked to recall their first source of information about menstruation. In Age Group 1 the responses were mother (8), sister-in-law (1), aunt (1), grandmother (1), and no one (1). The women of Age Group 2 responded mother (9), sister-in-law (1), sister (1), and no one (1). The majority of both age groups reported their mother as their source of information, indicating the centrality of a mother's personal understanding in formulating her daughter's perception. All reported sources were of a woman in the family, with the exception of the two women who reported no one discussed menstruation with them.

Restrictive Practices

The women of both age groups were asked whether they are allowed to enter and cook in their kitchen during menstruation. The distribution of responses for Age Group 1 included no (7), yes (4), and able to enter the kitchen but unable to touch anything or cook (1) (Figure 1). For Age Group 2 the distribution included no (7), yes (2), personally chooses not to enter (1), and able to enter the kitchen but unable to touch anything or cook (2) (Figure 2). With seven out of twelve from each age group responding they are unable to enter their kitchen at all while menstruating, this is the majority response. Age Group 1 had double the number of participants allowed to enter and cook in the kitchen than Age Group 2, suggesting a possible shift towards reduced segregation for the younger generation. In Age Group 2, the single response of the woman who chooses not to enter the kitchen could signify a personal belief in her impurity capacity to pollute her kitchen while menstruating.

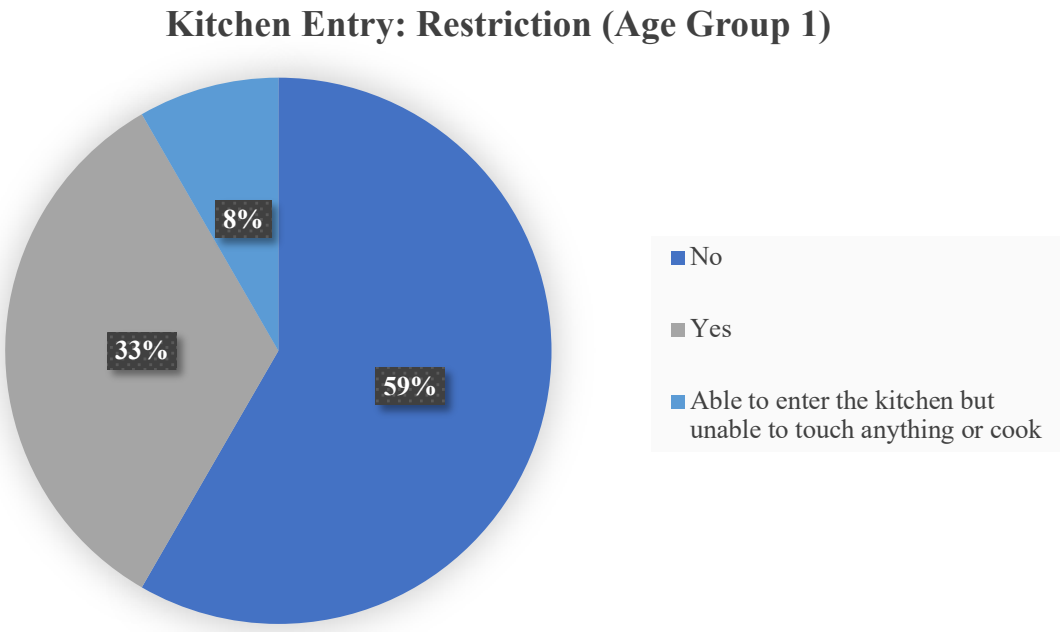

Figure 1. Responses of the twelve participants in Age Group 1 (18-26 years) regarding whether they can enter their kitchen and cook during menstruation.

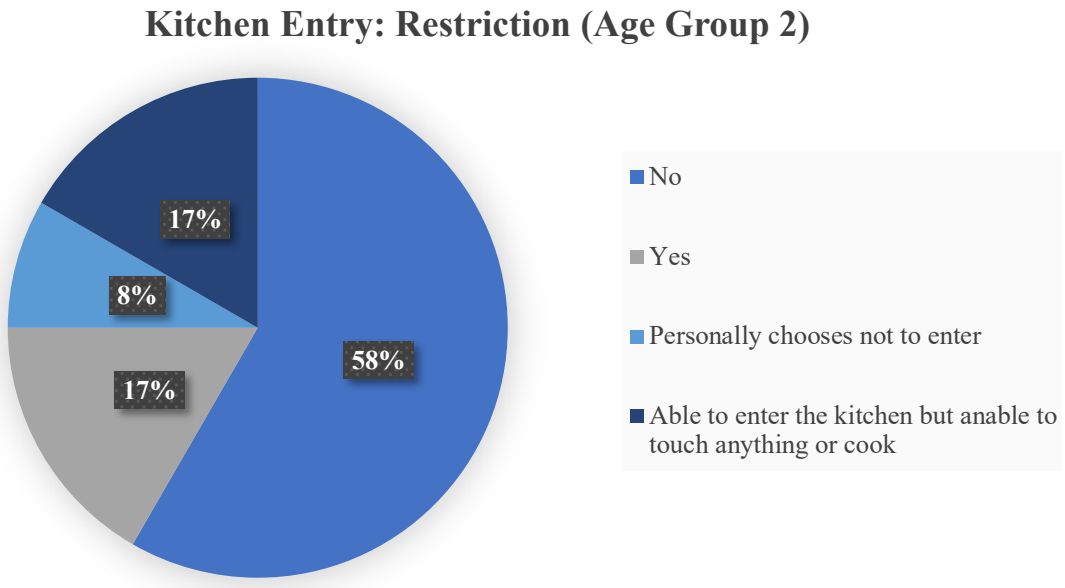

Figure 2. Responses of the twelve participants in Age Group 2 (35+ years) regarding whether they can enter their kitchen and cook during menstruation.

The women were next asked whether they personally believe women should be restricted from working in the kitchen while menstruating. Nine out of the twelve women in Age Group 1 answered this question (Figure 2). For Age Group 1, the responses to this question in relation to the previous question's responses of their experience of kitchen entry varied. Only women that are personally prevented from entering their kitchen believe women should remain restricted in that way, suggesting their belief in the impure and polluting qualities of menstruation. Two responses in Age Group 1 of women disliking their restrictions but remaining mandated by their families to refrain from the kitchen could indicate a disconnect in the level of the menstrual stigma between young girls and those in positions of power within the households. The household menstrual stigma could be upheld by a mother in law or by other men in the house, all of whom would have significant power and control over the younger woman compared to her own limited personal autonomy.

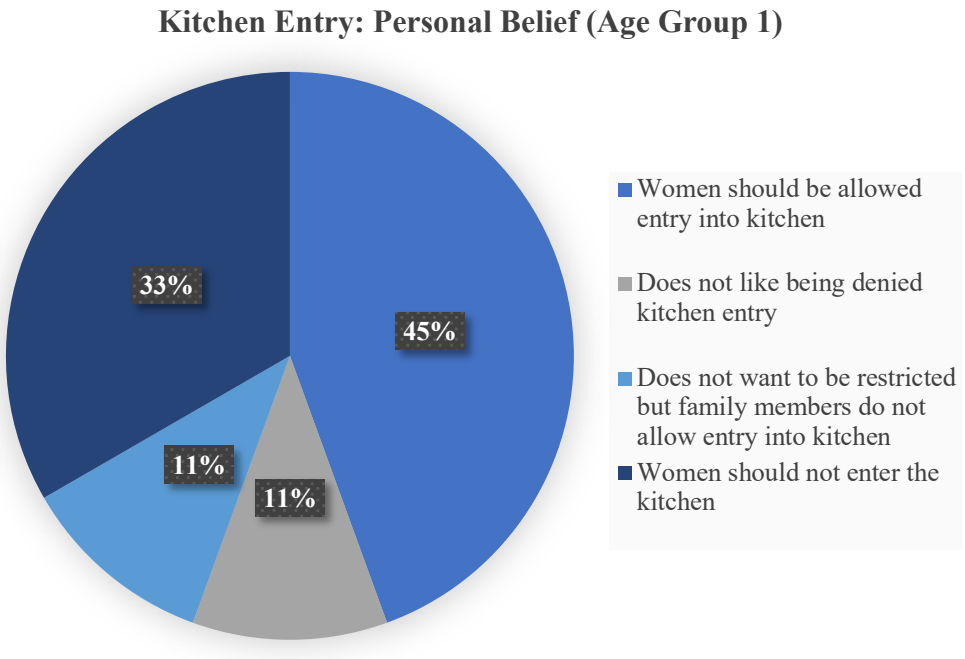

Figure 3. Response of six participants in Age Group 1 (18-26 years) when asked whether women should be restricted from entering the kitchen while menstruating.

Five out of the twelve women in the Age Group 2 responded to the question over their belief on women's kitchen entry (Figure 3). Out of the five responses to this question, only the woman who reported being able to enter her kitchen responded that all women should be allowed entry. The consistency of personal belief with familial practice could indicate a more uniform flow of information in the household. However, her ability to enter the kitchen to cook could also be based on necessity rather than a lack of stigma. If no other female is accessible in the household to cook while she menstruates, the family could still hold a strong stigma against menstruation and demand the woman to take other measures to purify herself prior to entering the kitchen to cook. A 37-year-old woman responded that while she believes women should be allowed into the kitchen, her family does not agree. This indicates that even as age increases, the female's autonomy over herself remains limited. This also demonstrates a discord in familial understanding of menstruation in which the woman understands menstruation to be normal while the family still views her as impure and a source of pollution. The last two responses are from women who uphold the belief that women should be restricted from kitchen entry. These indicate a lack of understanding of menstruation as a natural physiological process throughout the household. One response included the statement that she carries this practice forward by preventing her daughter from entering the kitchen while menstruating. This emphasizes the importance of familial influence where older generations determine the experiences of younger generations. Even when daughters become more educated on the normalcy of menstruation, their mothers and mothers-in-law will maintain ultimate authority over them and can choose to uphold traditional stigmas.

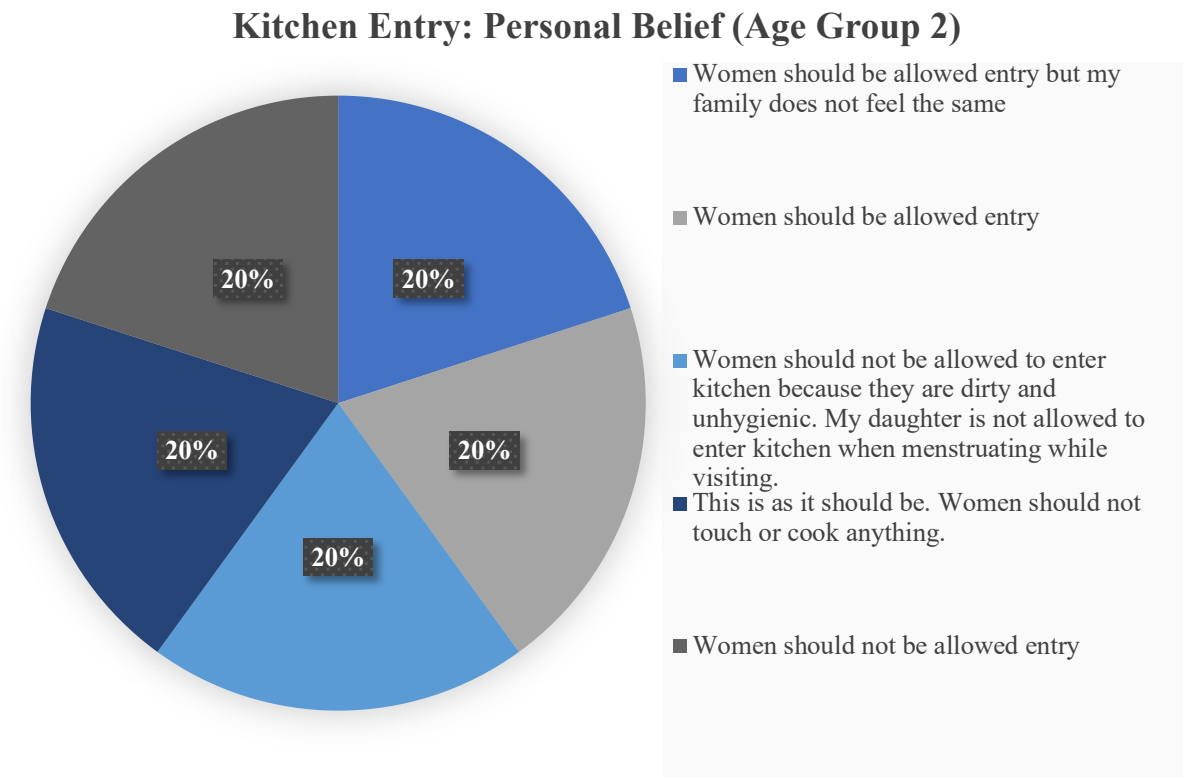

Figure 4. Five responses from women in Age Group 2 (35+ years) when asked whether they believe women should be restricted from entering the kitchen while menstruating.

The women were then asked whether they are allowed to sit during puja and auspicious ceremonies with their families while menstruating. In Age Group 1, the responses included yes (5) and no (7). The responses for Age Group 2 were yes (3), no (5), personally choose or prefer not to go (3), and able to enter the rooms but cannot perform ceremonies or puja (1). The next question asked whether they can enter prayer rooms during menstruation. Eleven of the twelve women in each age group responded to this question. In Age Group 1, the responses included yes (3) and no (8). The Age Group 2 responses included yes (1) and no (10). Following this, the participants were asked if they believe women should be restricted from participating in

ceremonies. Eleven of the twelve Age Group 1 respondents answered no (10) and yes (1). Ten of the twelve Age Group 2 respondents answered no (8) and yes (2).

In comparing the number of women that are allowed to enter prayer rooms and ceremonies to the personal belief of the women, a clear disconnect exists. Additionally, fewer women were allowed to enter prayer rooms than to participate in auspicious ceremonies and pujas. Three women in Age Group 2 choose personally not to go to ceremonies. If they attribute this restriction to personal choice, it is possible the family does not fully enforce their segregation, but the females would face backlash for participating. The women might also believe themselves to be too impure to participate. In contrast to this second possibility, however, only one Age Group 2 respondent replied that she personally believes women should be restricted from participating in ceremonies. This signifies that one woman might believe that menstruating women are too polluted to enter religious spaces, but the others that choose not to engage in ceremonies could be experiencing pressure from other family or community members.

Familial Interaction

The women were then asked whether they interact with or touch their husbands during menstruation. Eleven of the twelve women of Age Group 1 responded with no (8), yes (2), and that they interact, but he does not touch her (1). All twelve Age Group 2 respondents answered the questions with responses including no (10) and yes (2). The majority negative response of each age group indicates that general avoidance of menstruating wives by husbands. This could indicate that a majority of husbands consider their menstruating wives to be impure and capable of polluting them. As a high percentage of the women are unable to interact with their husbands, this also illustrates the power dynamic between men and women within traditional marriages. The male avoidance of their wives suggests the belief that men possess a purity which women

can degrade with their polluting touch or presence. As the head of the household in traditional familial structures, the male is capable of enforcing these practices and demanding the wife to act in accordance with these traditional values that stigmatize her throughout menstruation.

To explore the flow of communication within the household, the women were asked who they discuss menstruation with within their home. Eleven of the twelve women in Age Group 1 responded no one (2), sister-in-law (2), daughter (1), mother (1), grandmother (1), mother-in-law (3), and both mother and mother-in-law (1). The twelve women of Age Group 2 responded with no one (4), daughter (2), sister-in-law (2), mother-in-law (3), and mother (1). The women were then asked whether any men in their household know when they are menstruating each month. In Age Group 1 the women responded yes (10) and no (2). The women of Age Group 2 responded yes (6), no (5), and they come to know through the woman's separation (1). More women in Age Group 1 reported that men in their house were aware while they were menstruating. This could be attributed to more open communication within the household or more secrecy from the older women.

Material for Menstrual Flow

All participants were asked what material they use to control menstrual flow and how they dispose of their menstrual hygiene product. In Age Group 1 responses included sanitary pads (9), cotton cloth (2), and both sanitary pads and cloth but prefers pads when accessible (1). When asked why they choose their reported menstrual hygiene product, eight women responded. Of the women using sanitary pads the responses included sanitary pads are more comfortable (2), cotton cloth is dirty (1), pads are better than cloth (1), safety (1), and skin problems (1). Of the two women using cotton cloth their reported reasoning was pads are unavailable (1), and using cloth is a habit as she dislikes sanitary pads (1). When asked about their disposal methods,

women responding with burning the pads or cloth, (9) throwing the sanitary pads in the dustbin (2), and washing, drying, and reusing cotton cloth (1).

In Age Group 2 the women reporting using cotton cloth (9), sari cloth (1), sanitary pads (1), and both cotton cloth and sanitary pads (1). When asked why they use their selected product, the woman using both reported that she prefers sanitary pads, but they are not accessible for her. The woman using sanitary pads reported her motivation as safety. The woman using sari cloth responded that the cloth is easily accessible, although she now buys sanitary pads for her daughter despite the expensive cost. Of the nine women using cotton cloth reasonings include, habit (3), accessibility of cloth (3), safety (1), no pads are available (1), and the belief that cloth is the right material to use (1). For disposal methods of the cotton cloth the women reported washing the cloth and reusing it (4), disposing in open water (1), throwing away (2), and burning the cloth (3). The sanitary pad user burns her waste and the sari cloth user either burns the cloth or buries it in the ground.

The women who use sanitary pads were asked where they received information about the pad. The nine sources of information for women of Age Group 1 using pads included 3 TV, 2 sister, 2 ANM, 1 school, and 1 doctor. The sources of information of the two women using sanitary pads in Age Group 2 were the 1 CRHP VHW and 1 mother. The disparity in exposure to TV between the two groups is evident, suggesting a more influential role of the media on the younger generation.

External Influences

The women were asked if they have observed advertisements about sanitary pads on their television or other electronics. In Age Group 1 the responses of the women were yes (10) and no (2). The women were then asked what they remember from the advertisements if they have

observed any. Nine of the twelve women gave answers including safety (5), the pads (3), and the brand name (1). A majority of the women of Age Group 1 had been exposed to sanitary pad advertisements and retained key messages of safety and the concept of a sanitary pad.

The reports of exposure to advertisements from women of Age Group 2 included no (8), yes (3), and indirectly hears about sanitary pad advertisements from her daughter (1). Regarding what they remember from the advertisements the three women responded that they did not understand the ad (1), received information (1), and had no option but to watch the ad while the TV was on (1). In contrast to Age Group 1, a majority of women from Age Group 2 lacked exposed to sanitary pad advertisements. Of the three that did report knowledge of the advertisements, none reported retaining information about the sanitary pad specifically.

Village Health Workers

Village A VHW

The VHW of Village A has been a VHW with CRHP since 1999 and has been concurrently acting as an ASHA since 2009. She reported learning about menstruation through training for leading the Adolescent Girls Program. When asked what she learned in training, she reported learning of hygiene management including that girls should take a bath during their menstruation and should dry their cotton cloth in sunlight.

VHW A reported visiting individual families to educate mothers and girls that a menstrual cycle enables women to become mothers. She said specifically, “Without a menstrual cycle, a woman cannot be a mother. It is an important cycle of life” (personal communication, November 23, 2019). She confirmed that they educate men, saying they teach that boys and girls are the same. She also said they teach boys women should be allowed to enter the kitchen and should not be made to sit separately. She added “it [menstruation] is a normal thing” as part of

the message she gives boys (November 23, 2019). Her tactics to educate the community members include starting with the grandmother first and telling her not to believe superstitions as menstruation is a natural phenomenon. She uses folk songs to help communicate the messages but says the most important step is first listening to the beliefs of the woman before providing rational arguments against the superstitions. She discusses that when she listens to the women first, they feel more valued and able to express themselves with her (personal communication, November 23, 2019). VHW A shared an example of how building trust allows the girls and women to speak and share stories. She reflects on a story she learned during an adolescent girls' group where one girl started her period during school and as there was too much bleeding, she was taken to a random water source to be cleaned but had no access to sanitary pads.

As stated previously, VHW A has been working in her community for 20 years. Her responses demonstrate her understanding of both the physical aspects of menstruation related to hygiene as well as the socio-cultural norms which limit women in her community that she has developed through training with CRHP and through years of involvement as a VHW.

VHW A reported telling the women to use sanitary pads if available but to use washed and sundried cotton cloth as the second option. When asked why she gives this recommendation, her response was that cervical and uterine cancer results from the use of unhygienic cloth. For disposal, she reported telling women to burn sanitary pads. She continued with the explanation that when cloth is thrown on the ground, animals will eat it and infections will spread as flies sit on the cloth and then the same flies enter houses and touch food items.

When asked how women are viewed in the community during menstruation, VHW A responded that this is dependent on how their families treat them as many restrictions on women still exist that prevent them from entering prayer rooms and kitchens. This indicates the

centrality of the family in defining the woman's role and the variation that could occur between households within a single community. Familial norms and expectations have significant influence on the woman's experience of menstruation and her portrayal to the community as a whole. For younger women, they maintain a position subordinate both to the men of the household as well as older women, such as their mothers-in-law. The norm for communication and gender roles within families consequently plays one of the most determining roles in the female's experience of menstruation. Despite her personal level of education, the woman could easily remain subject to stigmatized practices at the command of any family members.

VHW A reported that women in her village are still not allowed to enter prayer rooms and participate in auspicious ceremonies as well as restricted from kitchen entry. She responded that the women are considered impure and it is tradition in the community to restrict them. She also stated that in independent families, compared to joint families, the family members might not know when a woman is menstruating. For kitchen entry, she states that if a woman is allowed to enter, she still will be prevented from touching anything as it is believed that her touch will bring a curse onto the family.

In response to the question of whether she speaks to the community about these restrictive practices, VHW A stated that in village council meetings, known as gram panchayat in India, they bring five to ten women present to discuss that women should be allowed into the temple and village ceremonies. She explains that the presence of women creates a tension and the village council feels pressured to listen to them. When asked to define her objective in talking to the community about menstruation, she shared that if girls feel ashamed and pressured by their families and are unable to talk freely about menstruation their health will be negatively

impacted. Addressing this with adolescent girls is her main objective (Community Interview, November 12, 2019).

Village B VHW

VHW B has been a VHW since 2017 but has been working with CRHP since 2000. She also reported learning about menstrual hygiene management from CRHP during training to lead the adolescent girls' group. VHW B reported that she does not educate men in her community. When asked what informationshe tells community members, she responds that she tells women to use clean cloth, washed and dried in the sunshine to prevent cancer. She shared that when she discusses menstruation with the community, members react with questions and objections such as, 'Why should we listen to you? This is a tradition. We eat separately.'

Consistent with VHW A, she recommends women to use sanitary pads if accessible and clean cotton cloth as a second option. VHW B tells the women to burn the sanitary pads as well. When asked how women are viewed in the community during menstruation, she responded that they are hated. She reported one obstacle the woman faces is that she cannot touch food by herself so she must ask family members to give her food, in which case they often will neglect to give her enough. In some cases, the women also cannot change clothes throughout menstruation because to do so would entail polluting clean clothes. Just as VHW A reported, VHW B said women are more likely to be allowed into kitchens if they live in an independent family as opposed to a joint family. This is often due to necessity as she might be the only female available to cook, rather than due to an actual shift in the menstruation stigma. VHW B also reported that women are still prevented from entering prayer rooms and auspicious ceremonies as well as kitchens, however, she said women are allowed to enter temples (Community Interview, November 23, 2019).

CONCLUSION

Main Findings

The responses of the two VHWs demonstrate a clear understanding of both the social stigmas of menstruation as well as the continued occurrence of restrictive practices for women in their communities. Both VHWs confirmed the root of their own understanding of menstruation as CRHP. Despite this, few community women reported their VHW as a source of information on menstruation for them. A large gap in sanitary pad use exists between the two age groups, with the younger age group using sanitary pads while the older age group reported using primarily cotton cloth. This demonstrates an increase in accessibility and knowledge of pads in these communities due to advertisements, schools, and the spread of information through families and friends.

The VHWs reported recommending sanitary pad use to women in their communities. Although few women confirmed that they received this message from their VHW directly, the spread of menstruation awareness and dilutions of stigma could occur indirectly. From one conversation between a VHW and community woman regarding menstruation, the community woman could then create a chain of information transmittal to her mother, daughter, and friends. In this way, CRHP is observed to increase health consciousness and social awareness in its villages although its direct impact was not observed in this study's selected villages. CRHP's Adolescent Girl's programs and Women's groups would provide direct contact with community girls and women and would illustrate clearer indications of CRHP's immediate role in perception transformation and shift. As the two villages selected for this study have been connected to CRHP long-term, a natural and central component of their generational shift is the information gradually dispelled from the NGO.

Reported disposal methods for the sanitary pads demonstrate burning to be most common, which releases toxic fumes into the air. The VHWs recommend burning the pads for disposal, which is consistent with the observed majority practice of surveyed community women. Some women reported dumping their sanitary pads in open spaces or open water. Both burning and dumping the solid waste release harmful components into the natural environment. This requires careful consideration of the sustainability of menstrual practices regarding both current health outcomes and future conditions of the environment that sustains communities. Various solutions for creating sustainable practices might exist in accordance with local environment, culture, and resource accessibility. One NGO, Goonj, distributes cloth pads to village women made by recycled, used clothing received at their sorting facilities in urban locations across India. Distributing reusable cloth pads to villages ensures the aid Goonj provides is appropriate for the setting of rural villages. With the cloth pad, Goonj also gives a waterproof carry bag for transporting used cloth back and forth for washing. These measures prevent women from needing to find alternative methods of disposal and from contributing plastic waste. However, the cloth pads do require an accessible source of water to frequently and hygienically clean the pads (personal communication, October 30, 2019). This practice cannot be suggested as a universal solution to menstrual product disposal, but rather as one specific NGO's approach to maintaining the environmental sustainability of their aid in the context of rural communities based on their priorities and resources.

Enforcing social segregation and behavioral restrictions during menstruation reflects the persisting stigma of menstruation as an impurity. A majority of women reported restricted interactions with their husbands while menstruating, a practice instilled to prevent pollution of the men by their wives. In both age groups, the practice of restricting women from entering their

kitchens, prayer rooms, or ceremonies was observed. However, women of the older age group were observed to have more restrictions than those in the younger group. This could suggest an increase in general knowledge and awareness of menstruation between the generations, although whether or not the source of this shift in knowledge in families is due to the young girls is unknown. An additional explanation for the lessened restrictions experienced by the younger age group could be the daughter-in-law's position within the traditional familial structure. The daughter-in-law is responsible for cooking and housework due to these norms, therefore if no other woman is available to cook when the younger woman is menstruating, she will be required to enter the household and cook for the family by necessity. In this situation, the loose restriction is not indicative of a reduced perception of impurity of the women but purely based on the male's expectation of the woman to provide household needs.

Because of the male status in the patriarchal constructed society, challenging male perceptions and awareness of menstruation is essential as well. With women reporting that they experience involuntary behavioral restrictions, the gap in awareness is with either the men or older women in the household. The culture of secrecy limits the information available to boys, making them hesitant to discuss menstruation. This maintenance of secrecy and ignorance perpetuates the ignorance in young boys who become fathers and husbands with influential roles in the household and community setting. If acted upon properly, educating boys could enable them to be better understand the reason for menstruation and reduce secrecy and stigma that suppresses the women in their lives (Mason *et al.,* 2017).

As access to technology increases, exposure to marketing and advertising schemes in the media also surges. The media is generally regarded to hold more power over those in younger rather than older generations due to the relatively recent explosion of its prevalence and

accessibility. This pattern of increased exposure to the media, specifically advertisements, among the younger generation was confirmed with the results of this study. With an understanding that messages of advertisements are reaching women in rural communities, it is important to remain mindful of the primary message and target audience of advertisements. As many women reported remembering the safety of sanitary pad use from advertisements, they might be basing their marketing approach in the advocacy of better health awareness. If this is the case, advertisements could be positively influencing women to consider health implications of their menstrual practices. Advertisements do also generally encourage consumerism and suggest their product as the only solution to an issue they project to their audience as a problem. In this case, projecting menstruation as a problem in need of their targeted solution could further stigmatize menstruation as dirty and unnatural, while limiting women's awareness of their options for safe menstrual product use. The media's role in determining the direction of future menstrual practices in rural areas is expanding and will continue to increase as younger generations grow into mothers.

This study cannot conclude causation relationships between the selected external influences and observed practices or perceptions in the two communities. It cannot definitively suggest the foundation of community perceptions, but rather gives possibilities for roots of perceptions and beliefs. Without providing a quantifiable value, the study explored the menstruation narrative between two generations to observe whether dilutions of traditional behaviors, stigmas, and beliefs occurred in communities connected with CRHP long-term. Vast regional diversity in India prevents the overgeneralization of experiences and perceptions of menstruation. The female experience of menstruation in rural compared to urban areas, between states, and in various environments within India varies significantly. This study cannot be

presented as a common representation for the experience of all women in India, rather it remains only fully applicable to the regional initiatives and influences of Jamkhed, Maharashtra.

Study Limitations

In some interviews, male CRHP staff were used to translate or record the answers in writing. This was due to necessity for a translator and shortage of available CRHP staff. The presence of male figures during interviews would have limited the liberty with which females answered the interview questions because of the sensitivity and secrecy of menstruation as a topic. In multiple interviews, the interviewees mother or mother-in-law was also present in the room. Because of the highly restricted status of younger women in Indian families, this would also limit the liberty with which the women answered the interview questions. In some interviews, the nearby mother or mother-in-law would interject and try to speak over the interviewee, at which point the elder woman had to be asked to be respectful of the interview. This demonstrates the power dynamic that exists and the additional limitation this posed on women's responses.

The language barrier created an additional limitation as all study participants spoke exclusively Marathi. The interview questions were originally drafted in English, before being transcribed into Marathi and read in Marathi by the mobile health team to the interviewees. Due to multiple steps of transcription and translation, the original intent of some interview questions was lost. The lack of ability to communicate also prevented the interviews from flowing semi-structured in a conversational manner, thus no follow-up questions could be interjected mid-interview after interviewee responses. Due to a significant loss of the original intent of interview question 12, this question has been wholly omitted from the results analysis.

Future Study Recommendations

Future studies should utilize consistent interview methods such as the interviewer and use of follow up questions. Additionally, all interviews should include minimal attendants to maintain privacy. The presence of only females in the private conversations would optimize honesty of responses. Surveying a larger quantity of women in multiple villages could decrease the influence of independent variation, increasing overall quality of the data results. To analyze perceptions, the interview questions should remain open-ended to allow for personal, descriptive answers. All of these would require additional time compared to that which was available for this study.

APPENDICES

Appendix 1: Interview Templates

Community Women Interview Template

Name:
Age:
Village:
Marital Status:
Education:
Occupation:
Family Members in Household:
Religion:

1. Why do you believe menstruation occurs?
2. Where have you received information about menstruation from?
3. What material do you use during menstruation?
    a. Why?
    b. If using sanitary pads:
        i. Where do you get sanitary pads from?
        ii. How often do you purchase them?
        iii. Is it difficult to afford the cost of sanitary pads?
        iv. Where have you received information about pads from?
4. How do you dispose of the material you use for menstruation?
    a. Do you experience any challenges with disposal?
    b. Has anyone discussed disposal methods with you?
        i. If so, what have they told you?

5. Where do you go to change pads or cloth and wash cloth during menstruation?
    a. Private or public?
    b. Do you feel safe and comfortable?
6. Have you seen advertisements for sanitary pads on television or other electronics? If so, what do you remember from the advertisements?
7. Who in your house do you discuss menstruation with?
    a. Do any of the men in your house know when you are menstruating?
    b. Has this changed over time?
8. Are you allowed into your kitchen to cook while menstruating?
    a. How has this changed through your life?
    b. Do you believe women should be restricted in their house and kitchen during menstruation?
9. Are you allowed to sit during puja or any auspicious ceremony with your family while menstruating?
    a. Are you able to enter prayer rooms?
    b. How has this changed through your life?
    c. Do you believe women should be restricted from participating in the ceremonies?
10. If field worker – do you still attend work while menstruating? Do you experience challenges in attending work while menstruating?
    a. If house worker – do you still do the same housework during menstruation? Do you experience additional challenges while menstruating?
11. If married - How do you interact with your husband during menstruation?
    a. Do you believe women should be restricted from touching males during menstruation?
12. How do you feel about your own body during menstruation?

Village Health Worker Interview Template

Name:
Village:
Age:
Years as VHW:
Education:
Religion:

1. Have you undergone training about menstruation with CRHP?
    a. What did you learn?
2. In what other ways have you learned about menstruation?
3. Who do you talk to in the community about menstruation?
    a. Do you ever educate men?
4. What tactics do you use to educate community members?
    a. What information about menstruation do you tell community members?
5. How does the community react when you talk to them about menstruation?
    a. If educating men, how do they respond?
6. What material do you tell the women to use during menstruation?
    a. Why?

    b. If sanitary pads, how do women access sanitary pads?
7. What do you tell women about disposal of materials used for menstruation?
    a. Why?
8. How are women viewed in the community during menstruation?
    a. Are there obstacles in communicating with their families?
    b. What has changed over time?
9. Are women in the village prevented from entering prayer rooms or participating in pujas and auspicious ceremonies?
    a. Why?
    b. How has this changed over time?
    c. Do you talk to the community about this practice?
10. Are women in the village prevented from entering the kitchen and cooking?
    a. Why?
    b. How has this changed over time?
    c. Do you talk to the community about this practice?
11. How do you think women and girls view their own bodies during menstruation?
    a. Why?
12. What is your objective in talking to the community about menstruation?
13. As a Village Health Worker, when you are talking about menstruation in the community, what are the challenges?

Appendix 2: Additional Figures

Table 1. Education level of 18-26 age group respondents.

Education	**Response Frequency**
4th standard	1
7th standard	3
8th standard	1
9th standard	3
11th standard	2
12th standard	1
Bachelor of Arts, Diploma of Education	1

Table 2. Education level of 35+ age group respondents.

Education	**Response Frequency**
Uneducated	6
4th standard	1
6th standard	1
8th standard	1
10th standard	1
Bachelor of Arts	1
No Response	1

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